

THE MUSICAL THEATRE MUSIC TEAM

Michael Starobin, author

with input from the ASMAC NYC community

If you have questions, please email advice@asmacnyc.org

Table of Contents

I.	Introduction.....	3
II.	Who is in the rehearsal room?.....	4
	The Music Supervisor.....	4
	The Music Director.....	4
	The Conductor.....	4
	The Associate Music Director.....	5
	The Rehearsal Pianist.....	5
	Specialist Arranger - The Dance Arranger.....	6
	Specialist Arranger - The Vocal Arranger.....	6
	Specialist Arranger - The Track Producer - Demos and Performance Tracks.....	6
	The Music Assistant.....	7
III.	Adding the orchestra: orchestrators, copyists, synth programming and contractors....	8
	The Orchestrator.....	8
	The Music Copyist.....	9
	Music Preparation Estimates.....	10
	The Music Contractor.....	10
IV.	A Typical Timeline.....	12
	1. Writing the Show, Early Demos.....	13
	2. Readings.....	13
	3. Workshops.....	13
	4. Casting.....	14
	5. Production Rehearsals.....	14
	6. Tech Rehearsals without orchestra.....	16
	7. Orchestra Rehearsals.....	17
	8. Tech Rehearsals and Dress Rehearsal with orchestra.....	21
	9. Previews.....	22
	10. Cast Recording.....	22
	Afterword.....	24

I. Introduction

This document attempts to explain how a music department functions in the creation of a musical and what positions make up the music department.

Every production is different. Some of these positions may not be needed on certain shows. On a smaller production, a single person may take on multiple responsibilities, if that is mutually agreed on a contractual level. On a larger production, multiple arrangers may be required. Every score is different having different stylistic requirements, often requiring specialists in a particular style.

Having an experienced, capable music staff protects a production from the avoidable mistakes of omission and neglect. Surrounding inexperienced directors or composers with an experienced staff is essential, and supporting younger members of the music staff with experienced collaborators within the department insures a smoother process.

Let's start with the various positions of the music department. We'll break that into two parts - who is in the rehearsal room with the director and the cast - and then who gets involved once the orchestra enters the picture. We will then look at a typical timeline for the music department in the development and production of a musical.

We will also make clear what part of the work (labor) is covered under the Local 802 agreement (without going into the details of rates and regulations) and what part of the creative work is not covered at present.

II. Who is in the rehearsal room?

The responsibilities of the Music Supervisor, Music Director, and Conductor are sometimes handled by three different people and sometimes by one person. As will be explained in detail below, these roles are almost constantly in the rehearsal room, though they may not wind up in a performance role in the show.

Here are some definitions to clarify the terminology.

The Music Supervisor

The Music Supervisor is someone who runs the music department but is not performing the show. This person will handle some or all of the arranging functions and works closely with the Composer and Director on the development of the show's score. If the Supervisor is not also the Music Director, they will oversee the Music Director's rehearsal work. If specialist arrangers are hired (for dance or vocal arrangements) they will oversee that work as well.

Not every composer is fully trained. Some cannot notate their songs and may need assistance in shaping their music to fit a dramatic context. This is often the case in a jukebox musical where there is no Composer present. Here the Music Supervisor is taking on many of the Composer's responsibilities in the development of the score. This can include writing incidental music, dialog underscoring, transition music and creating bow and exit music. This may also involve creating new arrangements of the songs themselves to fit a new dramatic context.

Occasionally, the Music Supervisor for a show is also the Orchestrator. But if not, the Music Director or Supervisor consults with the orchestrator to keep them informed of the changes from rehearsal (as the Orchestrator is usually off-site, writing the orchestrations.)

The Music Director

The Music Director is the person who rehearses the cast and orchestra. Most often the music director is the Conductor of the orchestra as well. The Music Director also attends casting calls and understudy rehearsals (though this last responsibility may be delegated to an Associate Music Director.)

Sometimes (when there is no Supervisor) the Music Director supervises the entire Music Department, including the creative functions of writing vocal arrangements, dance arrangements, and arranging incidental music. However, very often Dance Arrangers and Vocal Arrangers are brought in as separate specialist positions.

Music Direction is not a union position until that person starts conducting or performing at the keyboard. If the Music Director is also the Rehearsal Pianist (see below) that work is paid as a union position.

The Conductor

The Conductor is the person leading the band and cast during orchestra rehearsals, tech rehearsals and performances. Usually, this person is also the Music Director. If the show is led

from a keyboard, that is still considered being a Conductor. If the regular Conductor takes off for a performance (to observe the production from the audience or due to illness), a designated Associate or Assistant Conductor will conduct the performance. This is usually a member of the orchestra.

The Conductor is a union position. If the Conductor is playing keyboards there is a higher rate paid.

The Associate Music Director

The Associate Music Director is often the Rehearsal Pianist but may be a separate position in a large production. The position usually starts in production rehearsals, after readings and workshops where there may have been just a Rehearsal Pianist.

It is common for a musical in production to be rehearsing in numerous spaces at the same time (the choreographer in a large room working on a production number with the chorus and one lead, and the director in another room working on a scene and intimate duet with two leads.) The Associate Music Director fills in for the Music Director, coaching singers, making musical decisions and anything else needed to keep the rehearsal process functioning. The Associate will later consult with the Music Director to make sure the choices made are acceptable to the M.D. and/or the Music Supervisor.

If the Music Director cannot attend casting calls or understudy rehearsals, the responsibility will fall on to the Associate.

The Associate M.D. is often a member of the orchestra as well (most often a keyboard player). When the Conductor misses a performance, it is the Associate who moves up to the podium and conducts the performance.

On smaller shows where the band has a single keyboard played by the Conductor, the Associate will be someone from outside the band, coming in to lead the show from the keyboard.

The work of an Associate Music Director only becomes a union job as a rehearsal pianist, keyboard player in the orchestra or as a substitute Conductor. This is usually the case.

The Rehearsal Pianist

The Rehearsal Pianist (often the same person as the Associate Music Director) is hired to play for the cast rehearsals, freeing the Music Director to conduct the cast and better observe the rehearsals. If the production is smaller, the Music Director may be the only pianist at rehearsals. But having a separate Rehearsal Pianist allows simultaneous rehearsals in different rooms. Often this Rehearsal Pianist will then be the keyboard player in the orchestra as well and might also be the Associate Conductor who substitutes for the main Conductor. By participating in rehearsals, the Rehearsal Pianist will better understand how the show was developed and the individual needs of the actors - this will be vital information when they conduct the show themselves.

Sometimes additional players (usually rhythm musicians like drummers and guitarists) will also

be hired for the rehearsal period. A Rehearsal Drummer is often used if the show has a large amount of dance music.

The Rehearsal Pianist position (and any other rehearsal musician) is a union position for all rehearsals.

Specialist Arranger - The Dance Arranger

The Dance Arranger works closely with the Choreographer and creates new dance music based on the score's existing material. This music will often be within an existing song and will require changes to the song's accompaniment to be seamlessly integrated with the new dance music. The Dance Arranger works with the Choreographer during pre-production to start creating the music and then continues during cast rehearsals to continue developing and adjusting the dance music as it is taught to the cast. The Dance Arranger consults with the Orchestrator to ensure that the Choreographer's musical requests are incorporated into the orchestration. Sometimes a Dance Arranger will also take on the general arranging work (transitions, underscores, bows, exit music) if the Supervisor or Music Director is not already doing that work, or may share the responsibilities in a collaborative environment. At present, Dance Arranging is not recognized as union labor.

Specialist Arranger - The Vocal Arranger

The Vocal Arranger creates arrangements for the singers to create vocal harmonies and counterpoint not already present in the song. These will sometimes be in particular idioms to match the style of the show (gospel, doo-wop or swing for example) or sometimes dramatically based to establish the chorus as a character. The Vocal Arranger is usually present when these arrangements are taught to the actors to adjust them to the individual performers.

Sometimes the Music Director or Supervisor functions as the Vocal Arranger. Other times a specialist is brought in.

At present, Vocal Arranging is not recognized as union labor.

Specialist Arranger - The Track Producer - Demos and Performance Tracks

As part of the development process for a musical, song demos are often prepared. These often use electronic realizations ("sequenced tracks") instead of live players. The arrangement and execution of these tracks may reflect the final arrangements for the production or may be totally different. These tracks might be prepared by the Composer, the Supervisor or Music Director, the Orchestrator or a specialist brought in for just that purpose.

This work is not covered under the union at present.

For certain productions, performance tracks are created in programs like Ableton or Logic and used for workshops and readings. Some of these tracks are then used within the final production as an element of the orchestration (in combination with live instruments). These tracks may be created by the Composer, the Music Supervisor, Music Director, the Orchestrator or a specialist brought in for that purpose - a 'Track Producer'. These tracks may be used by the lighting and

sound departments as well to trigger other elements in sync with the music.

This work of a Track Producer is not to be confused with the Synth Programmer (see below), whose responsibilities are the programming of the sounds for electronic keyboards to be played live in the orchestra.

The work of a Track Producer is not covered under the union at present.

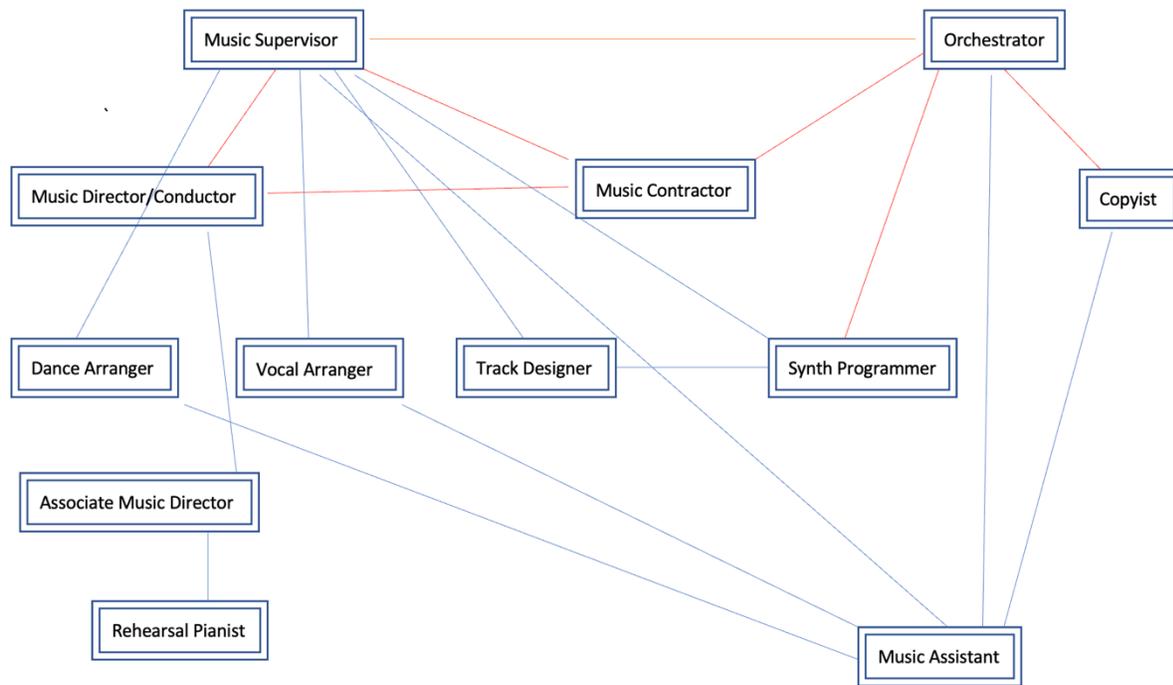
The Music Assistant

The Music Assistant's primary responsibility is maintaining the digital music files that are constantly changing as the score evolves during a show's development. This sometimes starts with the original notation of the songs (if the Composer is not capable of doing the work), preparing the piano-vocal score for rehearsal, entering the changes that come from the Supervisor or Music Director during rehearsals, entering the vocal arrangements as they are created and adjusted in rehearsals, and integrating the dance arrangements into the piano-vocal score. They will collaborate with stage management or the script supervisor to ensure script and score remain in sync. They will print and distribute updated pages to cast, creatives, and production team.

Other administrative duties the Music Assistant is sometimes called on to perform:

- Replace script/score pages, transfer notes from old to new pages, and flag script/lyric changes that might affect music for other members of the music department.
- Create and maintain organizational tools to aid in the music department's work, such as spreadsheets to track what state each number is at.
- Managing the online storage and distribution of musical materials.
- Coordinate communication with the Orchestrator, Copyist, and / or Keyboard Programmer to release completed songs/cues and changes as directed, with appropriate support materials (audio/video recordings, updated PV scores).
- Communicate with other departments (sound, stage management, production management) as directed re: music changes, script edits, and other administrative needs.

The work of a Music Assistant is not covered under the union at present.



III. Adding the orchestra: orchestrators, copyists, synth programming and contractors

A number of positions in the music department only get involved once orchestra rehearsals have started for the actual production. They may be hired and involved in planning prior to that for purposes of consultation.

Music Preparation is a term used to describe both orchestration and music copying. Let's look at each separately.

The Orchestrator

The Orchestrator takes the entire score (which has usually been scored for just piano) and creates an orchestration in a full score. The orchestration can be for as few as 3 or 4 players or for as many as 25-30 players, depending on the producer's budget for the orchestra. The instrumentation of the orchestra is decided by the Orchestrator in consultation with the Composer and Music Supervisor (or Music Director.)

The Orchestrator typically does not commence work until the show is entering full production. It cannot be done earlier as there will be changes to the songs, incidental music, and dance arrangements right up until the first preview. (Waiting till the rehearsal changes are done avoids the cost of paying the orchestrator for revisions.) So this job is done under great time pressure. This pressure is handled with a delicate balance of the Supervisor or Music Director getting enough material to the Orchestrator to stay on schedule, but not too early causing revisions after

it is orchestrated, thereby wasting time and incurring avoidable expense.

Because of this time pressure, orchestrators will occasionally ask a fellow orchestrator to take on some of the work to keep the process on schedule. This is usually done in consultation with the Composer and Music Supervisor (or Music Director). The aim is to have the score fully orchestrated by the orchestra rehearsals, but it is common for the orchestrations not to be finished until the first preview, and revisions can occur even after the first few previews.

Though the Orchestrator doesn't start work until the actual production, it is advisable to have the Orchestrator attend readings and workshops to become familiar with the score and have a sense of the choices being made by writers and directors as the play develops.

Sometimes the Music Department will have a rhythm section (drums, bass, and guitar) participate in workshops and readings. Also, the Choreographer may wish to have a drummer in dance rehearsals to establish the drum hits and patterns for the dance music. The Orchestrator usually incorporates that existing material into the final score.

The preparation of the score by the Orchestrator (quantified by score lines and pages) is a union job. But there is a creative element to orchestration. A piano part has to be altered to become an orchestral texture or a rhythm section. And sometimes the creative work of arranging falls to the Orchestrator instead of the Music Supervisor. The extra arranging work involved is sometimes paid as an overscale page rate or sometimes as additional hourly work.

The Music Copyist

The Music Copyist prepares the instrumentalists' individual parts for performance. In the musical theater this means taking the orchestrator's scores (which consist of all the parts on one page, like a master blueprint) and extracting each part a musician will play on a separate piece (or pieces) of paper. These separate pieces of paper sit on a musician's stand and make it possible for each musician to play their part during the performance. The Orchestrator's full score cannot be used for performance by the individual musician because the pages of the score are much too large and unwieldy. (A score page might only contain ten to twenty seconds of music, whereas one or two of the player's pages might very well contain an entire song.)

A theatre Music Copyist brings special skills to the task. When the players are not playing for long periods of time, the copyist will 'cue in' other instruments so the player is confident of when to re-enter. (While the regular player soon learns their part well enough to not need cues, there are often substitute players in the orchestra less familiar with the music. An individual part must therefore be formatted to prepare for many contingencies) The music is carefully formatted on the page to best allow insertions of new passages during previews saving the expense of printing a wholly new part when revisions occur.

The Copyist is present at all orchestra rehearsals, making note of changes being dictated by the Orchestrator or Conductor. They will consult with the players to make sure page turns do not occur in a place when the musician's hands are busy playing. As revisions and rewrites occur during the preview period, the Copyist will remove music from the orchestra pit, make changes

to the parts, copy over pencil markings the players made on the old music to the new music (where applicable) and update the Conductor's score as well. Sometimes this work, if not too extensive, takes place at the theater and in the pit.

The digital files the Copyist creates will become the source files for tours and stock rentals that occur after the original production.

While not a creative art, Music Copying is a skill requiring experience, great craftsmanship, instrumental practice and a deep knowledge of music. **It is a union job paid by the amount of music produced.**

Music Preparation Estimates

If the amount of music in a show (counted by the number of measures) is a known quantity, Orchestrators and Copyists can give a fairly close estimate of their costs. This estimate cannot take into account revisions and rewrites that will take place during the production rehearsals or previews. If the kinks of a problematic show and its score are worked out before production rehearsals (in readings and workshops), Music Preparation cost and effort can be saved. On the other hand, if a production makes large changes to a score once it is orchestrated and copied, further costs are incurred.

The Music Contractor

The Music Contractor hires the individual players for the orchestra. The Contractor's choices for the orchestra personnel are made in collaboration with the Composer, Music Director or Supervisor and the Orchestrator. They will arrange for the location of the orchestra rehearsals and any equipment rentals (or purchases) needed for the rehearsals and performances. With the Music Director or Supervisor, the Contractor oversees the physical placement of the orchestra into the orchestra pit. They deal with the theater staff in arranging lockers and a common area for the musicians.

The Contractor acts as a middleman between management and the orchestra. They make sure management is aware of all the union rules and oversees any problems the individual members of the orchestra may have. If a musician needs to be disciplined for lateness or unexcused absence this falls to the contractor, allowing the Supervisor or Music Director to not get involved with labor issues. If the producer needs to approach the union to ask for allowances or any other issues, again this falls to the Contractor, not the Supervisor or Music Director.

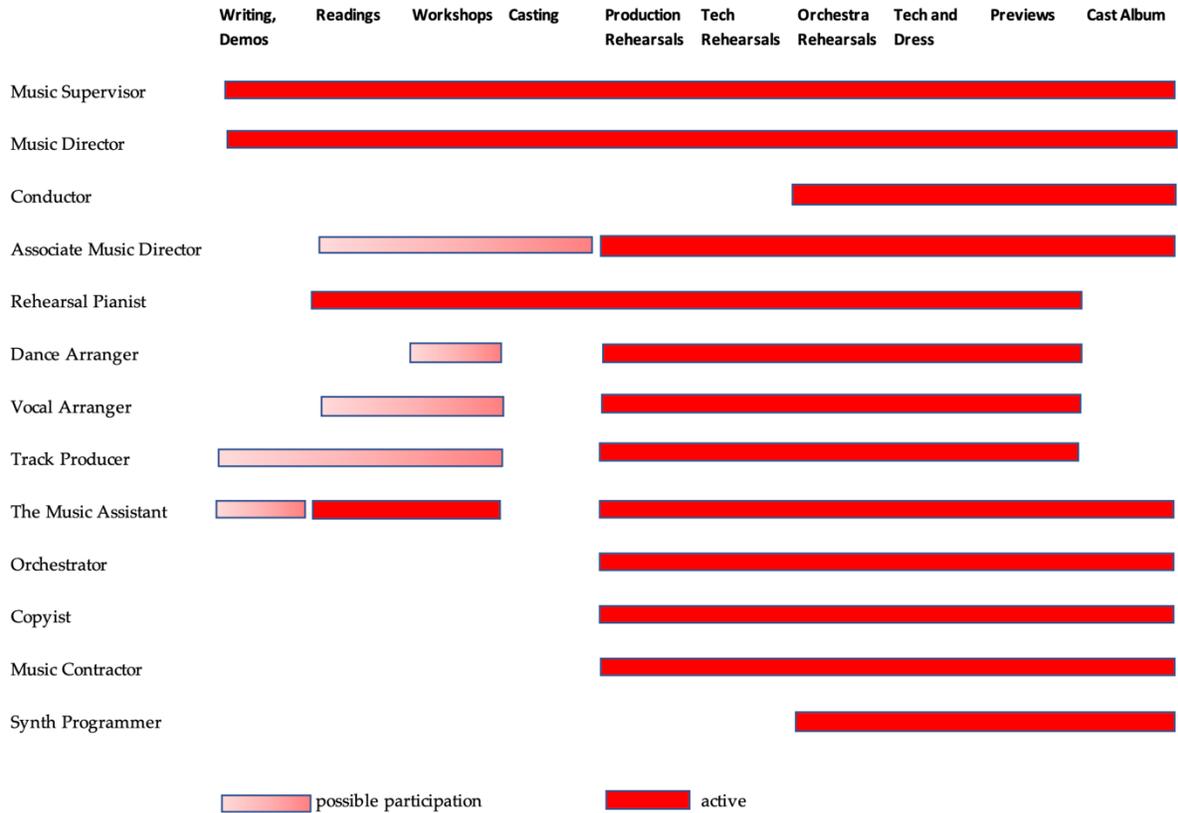
A member of the orchestra is designated as the official union contractor or 'in-house contractor'. This may be the Music Contractor the producer originally hired - but most Music Contractors are contracting numerous shows on and off Broadway. So they select one of the orchestra's players to be "in-house contractor" and that person earns the union contracting fee. The Contractor will sometimes delegate the weekly payroll preparation to the in-house union contractor.

The Synth Programmer

Electronic keyboards and electronic drums are often part of the Broadway orchestra. The Synth Programmer will take the Orchestrator's scores to see what sounds the Orchestrator has requested from electronic sources. The Programmer will arrange for the rental or purchase of the proper equipment to achieve the requested sounds. In recent years, most of the sounds produced are done with software synths running on a computer. The same computer will also be programmed to automate the switching of sounds so the player doesn't have to stop playing to change sounds. The programmer will consult with the music department to make sure sounds are balanced and approved. The sound department will work closely with the Programmer to make sure the electronic instruments work within the sound design for the orchestra.

And as mentioned above there may be tracks created by a Track Producer that need to be triggered by a musician. Sometimes these tracks are triggered from the equipment the Synth Programmer has setup - so the two designers will coordinate their work together (if they are not the same person.)

At present, Synth Programming is not recognized as union labor.



IV. A Typical Timeline

The development of a musical may take anywhere from a few years to as much as an entire decade. For the music department (usually just a Music Director at first) this requires a commitment of loyalty as payment at first is minimal, the work demanding and the chance of the project reaching full production is always a gamble.

We will break down the development and production process into 10 steps:

1. Writing the Show, Early Demos
2. Readings
3. Workshops
4. Casting
5. Production Rehearsals
6. Tech Rehearsals without orchestra
7. Orchestra Rehearsals
 - keyboard programming rehearsal
 - orchestra rehearsals
 - sitzprobe (see below for explanation)
 - the orchestra pit - equipment move - seating call
 - sound check
8. Tech and Dress Rehearsals with orchestra

- 9. Previews, Continuity Calls
- 10. Cast Albums

1. Writing the Show, Early Demos

While most of the work at this early stage is about writers creating the show, the Composer (if not capable) may need the assistance of someone to notate their songs. This work may be done by someone who will eventually become the production's Music Assistant. The Composer (if young and/or inexperienced) may also need the assistance of a more experienced arranger, who may be a prospective Music Director or Supervisor. Arranging work done at such an early stage implies that the arranger's work is integral to the creation of the score and such a contribution should be recognized. (This is currently rarely the case, on an individual basis.)

Even before a director or actors are hired, the Composer or a prospective producer may feel the need for demos of the songs to share with others to awaken interest or to request judgement and advice. These demos may involve the services of an arranger who will later become Music Director or Supervisor or Orchestrator - or may involve a specialist who only works on the early demos.

2. Readings

Readings are the first full assemblage and presentation of book and score. The actors may perform in seats, gathered around a table. Or they may stand, facing a few attendees with scripts and vocal scores on music stands.

Rehearsal time with the cast is limited, so the music department is expected to teach the score as quickly as possible. This is done by a Music Supervisor and/or the Music Director, sometimes assisted by a Rehearsal Pianist.

The Music Assistant is usually present as well to notate the changes made to the score as it is taught. Vocal arrangements may or may not be created and taught at this stage - sometimes they are created later for workshops.

Additional musicians (drummers, guitarists) are not usually hired for a reading.

3. Workshops

Workshops are staged simply with the actors usually off-book. There may be choreography, simplified to fit the limited space. Sometimes, if additional instruments are playing, a minimal sound design may be executed. A small, invited audience usually attends.

The Supervisor and/or the Music Director have more time to teach the score and to execute vocal arrangements created by themselves or a specialist Vocal Arranger. Because there are no orchestrations for a workshop, vocal arrangements are often used in their place to provide color and heft to the show's sound. This should be re-examined in the final production process to allow a better balance of vocal and orchestral sound and to insure the proper dramatic use of vocal arrangements.

If choreography is also done for the workshop, a Dance Arranger may also be hired to create music for the Choreographer. It should be noted here that the Dance Arranger will usually spend time working with the Choreographer outside the workshop or production process, creating and shaping the dance music so that it is ready to teach during workshop and production rehearsals.

The Music Assistant will again be present to notate the changes made to all aspects of the score.

There is usually a Rehearsal Pianist present (who may be the future Associate Music Director), allowing the Music Director to conduct the workshop and the Music Supervisor to observe. Sometimes a full rhythm section (piano, bass, guitar, drums) is used for a workshop. The Music Contractor will be involved with the hiring of the additional players for the workshop.

Synthesizers and digital rhythm tracks may also be part of the workshop, necessitating the services of a Track Producer and/or a Synthesizer Programmer.

A workshop music department can range from a single individual (a Music Director leading from the piano) to the full staff that will also work on the final production. It depends on the style of the score, the producer's budget and the full purpose of the workshop.

If the purpose of the workshop is to continue writing and shaping the piece, a more stripped-down department actually allows greater flexibility to change and rewrite during workshop rehearsals. If the purpose of the workshop is to get a head start on the production rehearsals, then the work of the full department should take advantage of the time.

The Orchestrator and Music Contractor usually attend the workshop performances to better inform their decisions for the coming production.

4. Casting

Casting (the choosing and hiring of the actors) may take place before the readings and workshops, but the final round of casting occurs before the production goes into official rehearsal.

The head of the music department (either the Music Supervisor and/or Music Director) attends casting calls with a view towards maintaining the quality of the singers hired and the balanced distribution of vocal ranges for the vocal arrangements. Chorus members are also chosen with an eye towards the understudying of leading or supporting roles in the cast.

A pianist is required at casting calls to accompany singers in their chosen audition songs. This is a special skill that requires excellent sight-reading, transposition on sight and quick reactions to follow nervous auditioners. Casting directors often have preferred pianists who specialize in this work.

5. Production Rehearsals

Production rehearsals may be as little as 3 weeks (with a week of tech rehearsal following) or as long as 6 weeks before tech starts. Much of this depends on the condition of the show: Does the

script and score need more revision and rewriting? Is there a great deal of choreography to create and teach during this period? How much have the producers budgeted for the rehearsal process? (It should be noted that the question of 'how long does the Orchestrator need to properly orchestrate the score' is not usually taken into account.)

Rehearsals for the full production take place in a large rehearsal room with the music department placed in a front corner. This allows a view of the 'stage' area but locates the piano's sound far enough away from the center where the director is sitting to allow the lyrics to be clearly heard, avoiding the need for vocal amplification during rehearsals.

The Music Director, if conducting the cast during these rehearsals, should be placed more towards the middle allowing the actors to better see the Music Director's cueing and cut-offs. This may make it difficult for the Rehearsal Pianist to see the Music Director peripherally - but a compromise is found for the best visual communication.

The Supervisor will usually float between the Director and the Music Department, keeping communication open at all times.

Occasionally the Rehearsal Pianist will give way to the Supervisor or Music Director (acting as an arranger) to let them try out new incidental music or scene changes directly from the keyboard. The same is true for the Dance Arranger, who may play the new dance arrangement before it is fully notated for the Rehearsal Pianist to play. As new arrangements are approved, they are given to the Music Assistant who adds them to the piano-vocal score. The Rehearsal Pianist then plays them for rehearsals going forward.

In production rehearsals the Associate Music Director (who is usually the Rehearsal Pianist) will sometimes handle rehearsals in one room while the Supervisor and/or Music Director is in another room. Often the Associate will work privately with one of the leads, coaching them on their solo songs.

Scene change music may be created in the rehearsal room. But the question of exactly how long the scene change requires may depend on how fast the set can move, or how quickly an actor can make a costume change. Those timings can't be finalized until the next stage, tech rehearsals. As a result, scene changes are the last cues released for orchestration.

At the end of each week of rehearsals There is usually a run-through. It may be just one of the two acts or both. It is essential to have the Orchestrator attend these run-throughs to stay aware of what has changed in the numbers about to be orchestrated or those already done.

If the Orchestrator cannot attend run-throughs, the Music Assistant should record either video or audio for the Orchestrator if the production is not already creating such videos for the various designers. The Music Assistant (with the proper permissions) should record video or audio on a phone to pass on. Even the crudest of audio recordings can inform an Orchestrator of tempo changes, vocal timbres, and interpretations that the rest of the music department might not think to mention because they have been living with the changes for a few weeks.

During the production rehearsals material needs to be fed to the Orchestrator so the music is orchestrated in time for the orchestra rehearsals (which usually start just about the same time as tech rehearsals.) Music least likely to be changed should be orchestrated first - solo ballads and numbers where the staging (and therefore the musical structure) is least likely to change. Dance numbers require more effort from the orchestrator since there are more instrumental sections - these need to be carefully released when the routine seems to be set but while there is still time to get them done. In any case, it is common for changes to come from the rehearsal room once the Orchestrator has already started. If the Orchestrator has already passed the finished orchestration on to the copyist, more expense will be incurred to make changes in existing digital files or even on the printed parts. These last-minute changes cannot always be avoided. But careful planning by the music department (and cooperation from other departments) can smooth the process.

The Music Assistant plays a vital role during this period of changes, revisions, and releases for orchestration. The Music Assistant will keep track of all changes made by the various arrangers - and feed this information to the Orchestrator (who is not in the rehearsal room). This assures that the latest changes will be included in the final score.

During this time the Orchestrator is sending the finished scores to the Copyists who are preparing the orchestral parts for rehearsal. Copyists will keep the parts in their digital format at first, delaying the printing to paper till the last possible moment. This facilitates a quicker revision process as last-minute changes are coming from cast rehearsals.

Additional musicians may be hired to play production rehearsals as they were for the workshop process. This is usually limited to drummers and guitarists, with the occasional use of digital rhythm tracks as well. These additional players may be playing from the same piano-vocal scores that the Rehearsal Pianist is using. Or rehearsal parts may have been prepared by the Supervisor or Music Director or the Music Assistant. Sometimes these parts will be passed on to the Orchestrator to include in their score.

6. Tech Rehearsals without orchestra

At this point the music department goes on double duty. As Technical Rehearsals start, so do the Orchestra Rehearsals. Though they are usually simultaneous, we will first look at each separately and then at how they come together.

Tech Rehearsals occur when the production moves out of the rehearsal room and onto the theater's stage where the set has been constructed. During these rehearsals every technical element of the show is put together and coordinated. It may take 5-8 days to work through the entire show, with occasional jumps back to run longer sections. Tech rehearsals take place in the afternoon and evening (usually for 10 hours in a 12-hour period, the so-called "10 out of 12").

The Music Supervisor and/or Music Director, the Rehearsal Pianist (who is usually the Associate Music Director) and the Music Assistant attend these rehearsals. If a rehearsal drummer has been used in rehearsals, they will also be present for tech. The moving of the set can finally be timed and the scene change music can now be set. Changes within songs and dances may also

occur to adjust for the physical space of the theater and set moves within musical numbers.

Vocal arrangements may be adjusted at this time, as the vocal sound going through the sound design will be different than what it was in the rehearsal room.

7. Orchestra Rehearsals

Orchestra Rehearsals usually occur 7-10 days before the first preview. For a new score (as opposed to a revival) the requirements are:

- 3 hour keyboard programming rehearsal (in the rehearsal hall)
- 12 hours full orchestra (in the rehearsal hall)
- 3-4 hour rehearsal of cast and orchestra ('sitzprobe') in the rehearsal hall
- The orchestra pit - equipment move
- 3 hour seating call for orchestra in pit
- 3 hour sound check in pit
- 2 to 4 tech rehearsals and dress rehearsals

It is always advisable to first rehearse the orchestra in a rehearsal hall where the band can hear itself easily without dealing with the issues of sound monitoring and sound design that occur when rehearsing in an orchestra pit. A rehearsal hall also allows the Composer, Orchestrator, Supervisor, specialist arrangers and others to easily hear the new orchestration and to make their adjustments.

3 hour keyboard programming rehearsal (in the rehearsal hall)

Because of the complication of synthesizer programming and the numerous patch changes a player triggers during performance (sometimes 250 times during a show), it has become standard to hold a separate three hour rehearsal call for any musicians operating synthesizer or computer equipment during a performance. If this is not done, much time will be lost during the full orchestra rehearsals solving technical problems and showing the players which sound they should be on at any given moment.

This rehearsal will be attended by the musicians playing the synthesizers, the Synth Programmer, the Digital Track Designer, and the the Orchestrator (who will be approving the sounds the Synth Programmer has chosen.) The Composer, the Supervisor and/ or Music Director may also be attending. The Copyist will usually deliver the music to this rehearsal but not attend.

12 hours of rehearsal of orchestra (in the rehearsal hall)

It takes 12 hours to rehearse a new orchestration for a new show. The Conductor (who is usually the Music Director) will rehearse the orchestra, showing them the tempos and pointing out any dangerous pitfalls in the routining of the music. (It is strongly advised that the Conductor spend more time playing the music than explaining it. Playing through a difficult spot often makes a player more aware of the difficulty than pointing it out 'in the abstract' through discussion. This is a common failing for young Music Directors.)

The Music Director will usually rehearse through the score in the order that it occurs in the show.

The 12 hours usually permits a slow work-through over 8-10 hours and then a final run through of the entire score.

The entire music department is usually present for these rehearsals, with one caveat - tech rehearsals may have started and someone needs to be playing piano for those rehearsals at the theater. There are various solutions for this. 1) Sometimes an additional pianist will be hired before tech starts to play the score for tech at the theater. 2) Because tech rehearsals occur in the afternoon and evening, sometimes the 12 hours are spread over three morning rehearsals of 4 hours each. 3) If possible, the orchestra rehearsals will occur on the 'day off' for the cast.

At the orchestra rehearsals the Orchestrator may be dictating changes which both the Copyist and Music Assistant will notate. Late changes from the cast rehearsals (or from the beginning of tech) may not have made it to the Orchestrator and need to be dictated at the orchestra rehearsals. If changes are too complex, the Orchestrator will have to write up the changes that night and the Copyist will put the changes into the parts the next day.

At this stage, scene changes still cannot be finalized, as the timings are just then being determined in tech rehearsals at the theater.

The Composer will be listening to make sure that their musical and dramatic conception has not been lost. The Dance Arranger will be listening to the orchestration of the dance arrangements and making sure the proper accents and weight are present. The Supervisor and Music Director will be listening to make sure rhythmic and harmonic support are clear for the actors, particularly those who need more musical support. They will also be making sure the Orchestrator understood the dramatic interpretation of each moment and that it matches what the cast has been doing in the rehearsal room. Often, the Sound Designer will drop by to better understand the nature of the orchestration they will be dealing with.

“Sitzprobe”: 3-4 hour rehearsal of cast and orchestra (in the rehearsal hall)

The sound of the show comes together for the first time at a rehearsal for cast and orchestra called a '*sitzprobe*'. This is German for 'seated rehearsal'. The cast usually stands in a line facing the orchestra. Behind the cast the writers and director sit with the Orchestrator and Supervisor to listen to the final result.

The actors will be hearing a different accompaniment than the piano they have lived with for the production rehearsals. The musicians will be hearing the melody and lyrics that is at the center of what they are playing but had been missing at the orchestra rehearsals. And the entire staff will hear one of the major design elements for the production, orchestration, added for the entire score at once.

For all the reasons listed above, it is essential to hold the rehearsal in a separate space where all the participants can judge this new element properly. (First hearing an orchestration in the theater means simultaneously dealing with a new sound design, the difficulties of a band squeezed into a new space and actors still adjusting to the difficult acoustics of hearing each other and the band through onstage monitoring.)

While actors may use microphones at a *sitzprobe*, the natural acoustics of everything being visible and audible in a rehearsal room better facilitates a judgement of how the music has come together (or not.)

A *sitzprobe* is a full performance of the score. Dialogue scenes will be skipped. Though there is usually an attempt to time out underscoring against dialogue at a *sitzprobe*, actors seldom speak at the same speed in front of a microphone, distracted by the orchestrations they are hearing for the first time. Still, the weight and color of a newly orchestrated underscore can be judged here for the first time.

Orchestral changes are not usually made at the *sitzprobe*. But there may be consultation between the music department and the rest of the creative staff as to changes that might need to be made going forward.

The orchestra pit - equipment move

We use the term “pit” even though theater orchestras are sometimes placed in a basement, a dressing room on the fifth floor and sometimes split apart and placed in numerous locations. It cannot be stressed enough that the best music is made when the players and the conductor can see and hear each other in the physical same space. Theater musicians are so talented and flexible that they commonly make the worst conditions work for performance. But the best music is made in the best working (and playing) conditions.

In the same vein, having a Conductor at the front of the stage (conducting or playing a keyboard) makes for the best communication between cast and orchestra. Conductors are often placed in a different space, with actors only seeing the conductor’s image on a video monitor. While this can work, the best communication (and a greater amount of resulting ‘theatricality’) occurs when all the performers are actually in the same room working together.

Though not actually a rehearsal, an essential step is the movement of the physical music equipment (synthesizers, drums, percussion, harp, piano) into the orchestra pit. Getting the equipment into the pit before the first music rehearsal in the pit allows the sound department to set up the many microphones required for drums and percussion, and to troubleshoot the connections of all electronic instruments in the pit. Usually the Supervisor and/or Music Director and the Music Contractor are present and do a preliminary setup of the where each player will sit in coordination with the Sound Department. The Synth Programmer usually attends to make sure their equipment is properly connected with the Sound Department.

3-hour seating call in pit

Because the production is holding tech rehearsals in the afternoon and evening, the seating call and the sound check usually occur as three hour calls on two successive mornings.

This is the first time the orchestra sits to play in the pit (or whatever space has been designated for the orchestra). Each section of the orchestra (winds, brass, strings, rhythm) take turns sitting in their positions, making sure they can see the conductor and have room to play their instruments (bowing room for string players, space for multiple instruments on the stands for the

winds, etc.) Lights for music stands will also be adjusted.

Players will take care that they are not being exposed to the loud playing of other instruments that might cause damage to their hearing (such as sitting right in front of a trumpet, or having a drummer's cymbal right by your ears.)

Baffling might be put up by the sound department to isolate drums or brass. Small video monitors may be used to allow players to see the conductor if their view is obstructed. If audio monitoring is needed by members (or all) of the orchestra, the monitors and headphones will be adjusted at this time.

If the seating has gone smoothly, the work of the sound check will be started at this earlier call.

The Music Director and the Contractor attend the seating. It is advisable for the Orchestrator to attend just in case the work of the sound check starts {if the Orchestrator wishes to be present for the sound check.}

The Copyist needn't attend the seating and sound check, but might deliver revisions or late completions from the Orchestrator, which the Music Director should try to read through as part of the sound check process.

3 hour sound check in pit

The sound check begins with each instrument playing alone for the Sound Designer. This allows the Sound Designer to make sure each microphone is correctly placed for the player and correctly patched into the sound system. The player will be asked to play both loud and soft passages to give the Sound Designer an idea of the dynamic range for each instrument.

The Sound Designer will then ask for passages to be played by each section of the band (reeds, brass, strings, rhythm). The Music Director should have picked out sections of the score that are typical and show the dynamic range for each section.

At this point the Sound Designer may ask the Music Director to have the whole band play together. The music played should show the Sound Designer the extremes of the score - the loudest and softest passages and the different styles of the score. Time should not be taken to give notes to the band - the Sound Designer needs to hear the band playing to make board adjustments.

As the entire band is playing, new problems may crop up with some players not being able to hear each other or needing additional sound protection. Keyboard levels may need adjustment with careful a consideration of exactly which element needs adjustment: the programming for a particular spot, the player's touch or volume pedaling, or the overall keyboard level at the board.

The Supervisor and/or the Music Director, the Contractor, and the Orchestrator should be in attendance (as well as the Composer.) This is a major step towards defining what the audience will hear.

8. Tech Rehearsals and Dress Rehearsal with orchestra

This is when the cast and orchestra first work together with the actual set and sound design. This will change how everything is heard. Panic should be avoided - when an actor can't hear the band a moment should be taken to adjust the monitors, often remixing the stage monitors to be mostly rhythm section. Where the actor could hear their voice resonating in the theater, now the band is resonating as well, and the actor may have trouble hearing themselves.

The focus for the Sound Designer at first is to simply make performance possible. The subtle details of the orchestration will have to wait until the performers are more comfortable on the stage and in the pit.

Hopefully when the band joins the tech rehearsal, the slow pace of setting lighting cues has been finished. If not, the orchestra may be sitting around for long periods without playing. It is possible for the Supervisor and/or Music Director to request a moment to run a number while the actors are standing in place for lights to be focused. But they need to be ready to have the orchestra jump back to the spot being teched if the rest of the production is ready to move on.

A Director who is sensitive to the needs of the music and sound departments will allow this kind of simultaneous rehearsal while everyone is waiting for a lighting cue to be finished. While it is distracting to the forward momentum of tech rehearsals, much can be accomplished by the music and sound departments in those moments.

It is hoped that the orchestra will have run through the entire show with actors before the final dress rehearsal. But it not unknown for tech rehearsals to fall behind and the first full run-through to be the final dress.

During the techs with orchestra the Music Assistant often sits close to the Music Director to take notes from the Music Director while conducting.

The final Dress Rehearsal usually has an invited audience. Besides adding the energy of audience reaction to the play, the presence of physical bodies filling the seats also affects the acoustics slightly. An empty theatre has different sound properties than a full one. What was carefully adjusted during tech rehearsal may suddenly be slightly off.

Playing through the show without a pause sometimes reveals new difficulties - instrument changes that are not possible in the actual flow of performance - audience reactions (or lack thereof) changing the pace of tempos or segues. Some actors hold back their performance until the audience appears and suddenly alter their onstage vocal performance and timings. The first run of a show with an audience can be like a surfer catching a great wave for the first time.

But knowing what works and what doesn't work can't be decided from a single run-through. Especially the final dress rehearsal which is usually filled with sympathetic friends of the production in the audience. It becomes clearer after the first 3 or 4 previews what is working well and what needs to be changed.

9. Previews

A show may preview for as few as 4 performances and for as many as 5-6 weeks of performances. It is a strenuous time as the show performs 6-8 times a week but also rehearses in the afternoons (on non-matinee days), trying out changes that may or may not go into that night's preview.

While the Music Director is leading the orchestra at the preview performances, the Supervisor will watch from the audience with the rest of the creative staff. The Music Assistant will be with either the Supervisor or the Music Director, taking notes. The Orchestrator and any specialty arrangers will attend some of the previews as well.

The cast rehearsals during previews will take place with the Supervisor and/ or Music Director, Rehearsal Pianist (or Associate M.D.) and Music Assistant in attendance. During previews it is rare that the orchestra is called for a full afternoon cast rehearsal unless a large sequence is being added to the show that requires extensive rehearsal with the orchestra.

Instead, the orchestra is rehearsed during previews with a one hour "continuity call" that takes place 90 minutes before the preview curtain. Revised orchestrations, new songs or scene changes are rehearsed during the hour. Actors are never officially called to a continuity call as it is too close to their curtain. But often the actors will 'drop by' to hear a new orchestration that will affect them.

Eventually, the changes stop and the production is "frozen". The final previews are performed and watched by the critics.

10. Cast Recording

The cast recording commonly occurs after the show has opened. But if the show had an out-of-town tryout production that was fully rehearsed and orchestrated, the recording may happen before the final production rehearsals (or during them.)

If the production has already opened (or is in previews), it is not wise to remove the percussion and electronic equipment from the orchestra pit for a recording - this would require expensive union calls and force the sound department to re-tech and re-mike the orchestra when the equipment is returned to the pit. Therefore, all electronic equipment and percussion is rented separately for the recording.

Changes are often made to the score to adapt it for an audio-only medium. Scenes in the middle of songs (with their underscoring) may be removed. Rewrites of the beginnings and endings of songs are common to remove the dialog that helped the song fit seamlessly into the book of the show but are now extraneous.

It is strongly advisable to have a recording production meeting with the Record Producer, Composer, Supervisor and/or Music Director and Orchestrator to plan these alterations. Time should be given for the Orchestrator and Copyist to make the desired changes to the instrumental parts. The Music Assistant will usually prepare the revisions to the Piano-Vocal for

the Producer and Recording Engineer to work from.

The Copyist may need to remove the performance parts from the musician's stands in the pit and take them to the studio for the recording. This is done with the assistance of a member of the orchestra who has been given the job of Librarian (which is a paid union position.) This is done very carefully, as the music needs to be returned quickly to the pit stands after the recording for performances to continue.

A cast album is typically recorded after the Sunday matinee of a Broadway show with 1 three-hour session on Sunday night and 3–4-hour sessions on Monday, the next day (Mondays are typically the day off for a Broadway performance schedule.) This is typically done with everyone recording at the same time - vocals and orchestra. But some cast albums are recorded more like non-theatrical recordings - rhythm section records first, then winds, brass and strings and finally vocals. The style of the music determines the best process.

The Music Contractor and Stage Manager need to be consulted to accommodate the complex union rules for actors and musicians to work in the studio within the recording's budget.

Afterword

This document provides a snapshot of a music department in the early 21st century. But musical theater is always changing. Development of new musicals has moved from Broadway to off-Broadway and now to regional theaters where the resources available are limited. The style of music for theater is constantly changing. New technologies are developed and become part of a theater musician's toolbox. The ability to maintain an audience's interest and attention is always being challenged by the omnipresence of film and video media's rapid editing and ability to direct the viewer's focus.

But the nature of live theater is unique - performers (actors and musicians) in the same physical space as an audience have a power that brings a sense of community to storytelling that is not present in visual media. Theater will always change but will always be a part of our world. And the musical theater has the power of marrying words and music to create moments of human contact that inspire us. For those of us who work in a music department, the hunger for those moments drives us to continue working on show after show.